

METHOD FOR DETERMINING AUTOMOTIVE BRAKE STRUCTURE VIBRATION DAMPING AND FRICTION MATERIAL BONDING

Abstract

A method and apparatus for determining the vibration damping characteristics of an automotive brake structure measures the vibration response of a brake structure during application of random-frequency wide spectrum excitation, followed by measuring vibration of the structure at particularly noted modal frequencies, using a confined bandwidth random-frequency vibratory excitation. The method and apparatus may be used also to assess the bonding or attachment characteristics of damping materials.